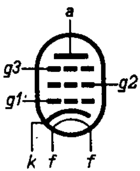
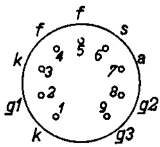
PHILIPS — EF 85

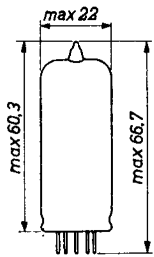
R.F. PENTODE with variable mutual conductance for use as wide-band amplifier
PENTHODE H.F. à pente variable pour utilisation en amplificatrice à large bande
HF- PENTODE mit veränderlicher Steilheit zur Verwendung als Breitbandverstärker

Heating:	indirect by A.C. or D.C.; parallel or series supply	
Chauffage:	indirect par C.A. ou C.C.; alimentation en parallèle ou en série	V_f = 6,3 V
		I_f = 300 mA
Heizung:	indirect durch Wechsel- oder Gleichstrom; Serien- oder Parallelschaltung	

Dimensions in mm
Dimensions en mm
Abmessungen in mm







Base, culot, Sockel: NOVAL

Capacitances Capacités Kapazitäten	C_a = 3,2 pF
	C_{g1} = 6,9 pF
	C_{ag1} < 0,007 pF
	C_{g1f} < 0,15 pF

EF 85 PHILIPS

Operating characteristics for use as R.F. or I.F. amplifier
Caractéristiques d'utilisation en amplificatrice H.F. ou M.F.
Betriebsdaten als H.F.- oder Z.F.-Verstärker

$V_a=V_b$	=	250		V
V_{g3}	=	0		V
R_{g2}	=	60		kΩ
V_{g1}	=	-2	-35	V
V_{g2}	=	100	-	V
I_a	=	10	-	mA
I_{g2}	=	2,5	-	mA
S	=	6,0	0,06	mA/V
R_i	=	0,6	>5	MΩ
R_{eq}	=	1,4	-	kΩ
r_{g1} 3)	=	9	-	kΩ
μ_{g2g1}	=	26	-	

$V_a=V_b$	=	250		250		V
V_{g3}	=	0		0		V
R_{g2}	=	18 1)		22 2)		kΩ
V_{g1}	=	-1,9	-35	-2,1	-35	V
V_{g2}	=	97	-	103	-	V
I_a	=	10	-	10	-	mA
I_{Rg2}	=	8,5	-	6,7	-	mA
S	=	6,0	0,06	6,0	0,06	mA/V
R_i	=	0,6	> 5	0,6	> 5	MΩ
R_{eq}	=	1,4	-	1,4	-	kΩ

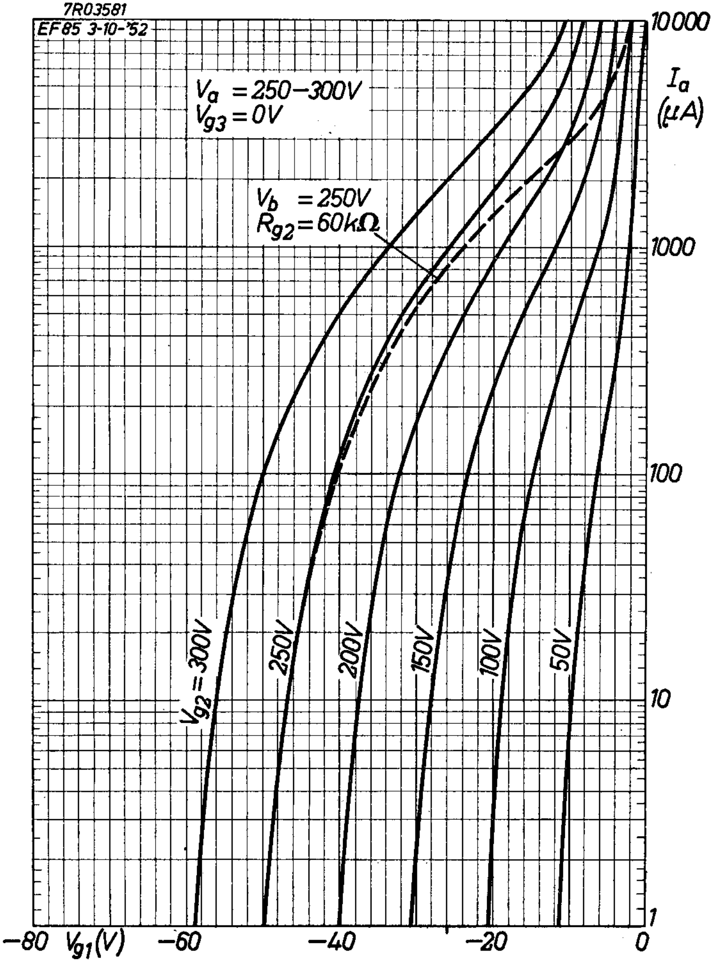
1) Common screen-grid resistor of EF 85 and ECH 81 as frequency changer.
Résistance grille-écran commune des tubes EF 85 et ECH 81 comme tube mélangeur.
Gemeinsamer Schirmgitterwiderstand der Röhren EF 85 und ECH 81 als Mischröhre.

2) Common screen-grid resistor of EF 85 and ECH 81 as R.F. or I.F. amplifier.
Résistance grille-écran commune des tubes EF 85 et ECH 81 comme tube amplificateur H.F. ou M.F.
Gemeinsamer Schirmgitterwiderstand der Röhren EF 85 und ECH 81 als H.F.- oder Z.F.-Verstärker.

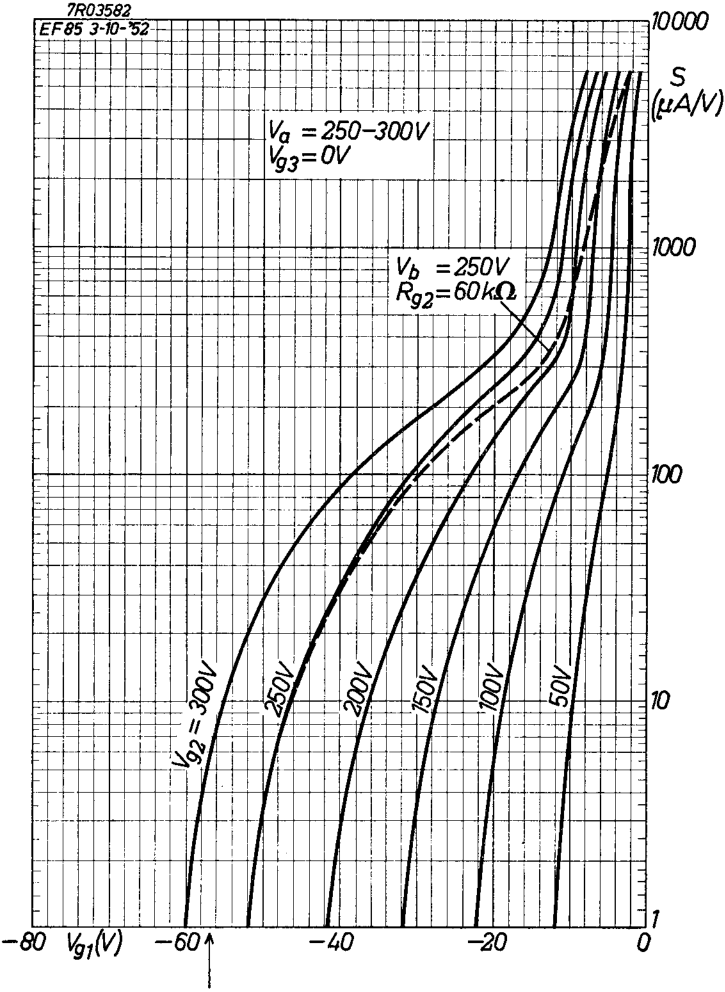
3) Input resistance at 50 Mc/s. Résistance d'entrée à 50 Mc/s. Eingangswiderstand bei 50 MHz.

Limiting values
Caractéristiques limites
Grenzdaten

V_{ao}	= max.	550 V
V_a	= max.	250 V
W_a	= max.	2,5 W
V_{g2o}	= max.	550 V
V_{g2}	= max.	250 V
W_{g2}	= max.	0,65 W
I_k	= max.	15 mA
V_{g1} (I_{g1}= +0,3µA)	= max.	-1,3 V
R_{g1}	= max.	3 MΩ
R_{kf}	= max.	20 kΩ
V_{kf}	= max.	150 V


7R03581
EF85 3-10-'52
Va = 250–300V
Vg3 = 0V
Vb = 250V
Rg2 = 60kΩ
Vg2 = 300V
250V
200V
150V
100V
50V
10000
Ia (μA)
1000
100
10
1
−80
Vg1(V)
−60
−40
−20
0

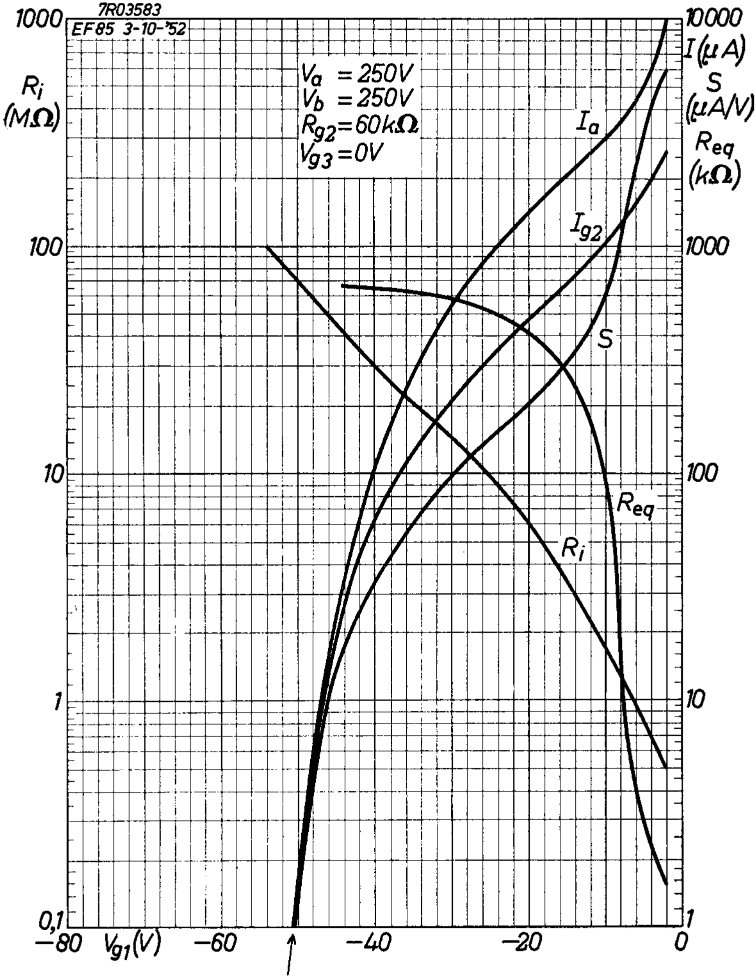
EF 85 PHILIPS



B

PHILIPS

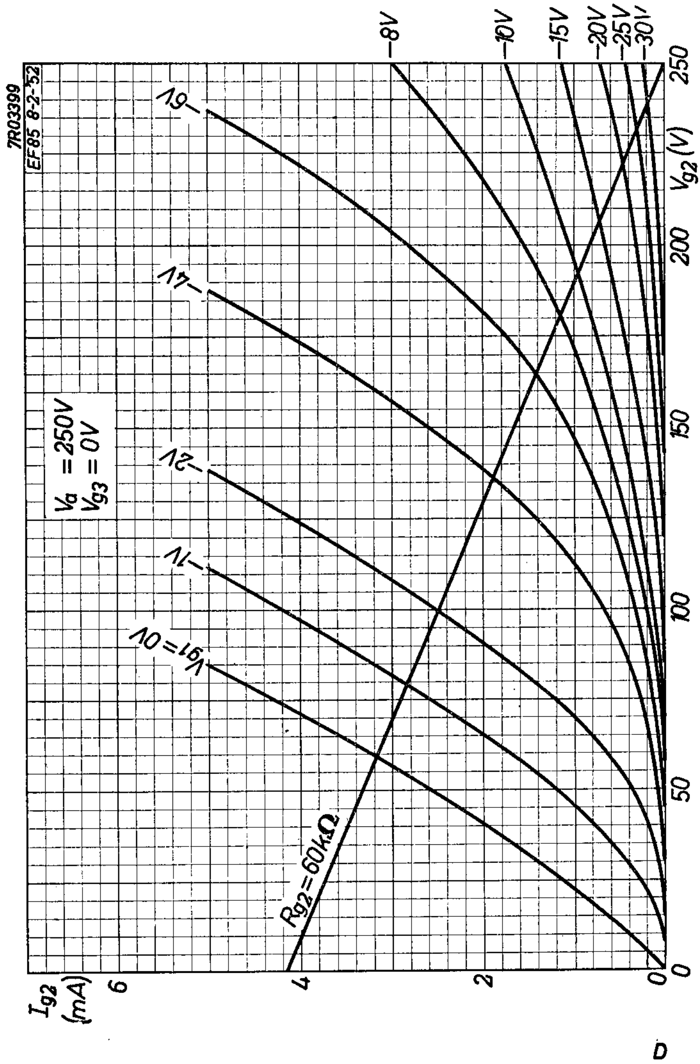
EF 85



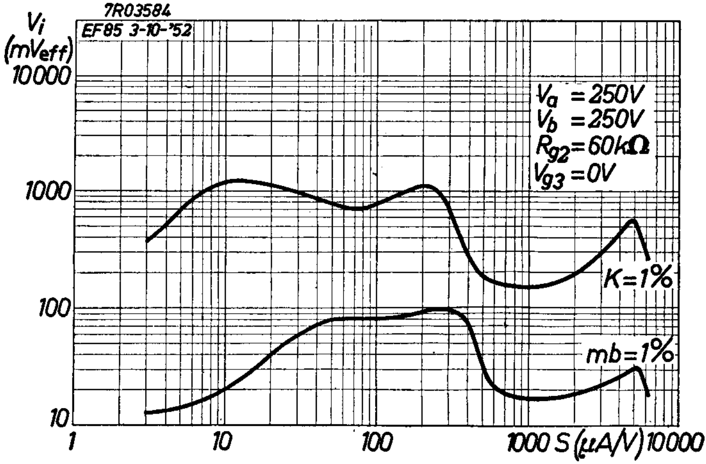
10.10.1952

C

EF 85 PHILIPS



D


7R03584
EF85 3-10-'52
Vi (mVeff)
10000
1000
100
10
1
10
100
1000 S (µA/V) 10000
Va = 250V
Vb = 250V
Rg2 = 60kΩ
Vg3 = 0V
K=1%
mb=1%

→ E

PHILIPS

Electronic Tube HANDBOOK

EF85

page	sheet	date
1	1	1955.06.06
2	2	1955.06.06
3	3	1954.11.11
4	A	1952.10.10
5	B	1952.10.10
6	C	1952.10.10
7	D	1952.10.10
8	E	1957.10.10
9	FP	1999.06.29